

Listing of claims:

1. (Currently Amended) An apparatus for determining a at least one response to a plurality of stimuli ~~a stimulus~~, the apparatus comprising:
  - a stimulus input that receives a ~~stimulus signal representing the stimulus~~ a plurality of stimulus signals that each represent at least one of the plurality of stimuli;
  - a response input that receives at least one response signal, each response signal being indicative of a response to at least one of the stimuli ~~stimulus~~; and
  - a correlator coupled with the stimulus input and the response input, the correlator correlating the received stimulus signals with each received response signal as a function of time to produce ~~an~~ a multi-channel associative mapping, the multi-channel associative mapping correlating the plurality of stimulus signals with both time and at least one of the response signals.
2. (Original) The apparatus as defined by claim 1 wherein the associative mapping is stored in an associative cache.
3. (Currently Amended) The apparatus as defined by claim 1 wherein the plurality of stimulus signals each comprise ~~stimulus signal comprises~~ a plurality of frames, the associative mapping correlating each frame with a portion of each response signal.
4. (Original) The apparatus as defined by claim 1 wherein at least one of the one or more input devices is a sensor that measures an environmental condition.
5. (Currently Amended) The apparatus as defined by claim 1 wherein the stimuli comprise ~~stimulus comprises~~ a time-delayed presentation.

6. (Original) The apparatus as defined by claim 1 wherein the associative mapping associates at least one of video, audio and response variables with time.
7. (Original) The apparatus as defined by claim 1 further comprising:  
an output that directs an output signal to a display device, the output signal including data for displaying the associative mapping substantially instantaneously after the creation thereof.
8. (Original) The apparatus as defined by claim 1 wherein the response input includes at least a first group of responses having first variables, and a second group of responses having second variables, at least one variable being different between the first group and the second group, the first group being disposed at a first angle to the stimulus that differs from a second angle of the second group to the stimulus.
9. (Currently Amended) The apparatus as defined by claim 1 further comprising:  
at least one monitoring device adapted to receive the ~~stimulus~~plurality of stimuli and generate the ~~stimulus signal~~plurality of stimulus signals, the at least one monitoring device detecting light outside the visible spectrum.
10. (Currently Amended) An apparatus as defined by claim 1 wherein the correlator includes a stored stimulus signal to compare against the plurality of stimulus signals ~~stimulus signal~~ and generate a difference signal representative of the differences between the plurality of stimulus signals ~~stimulus signal~~ and the stored signal.
11. (Original) The apparatus as defined by claim 10 wherein the processor alarms if the difference signal exceeds a threshold value.

12. (Original) The apparatus as defined by claim 1 further comprising a video recorder being adapted to record an image generated by the display substantially instantaneously after the creation thereof.
13. (Original) The apparatus as defined by claim 1 further comprising:  
an analyzer in electrical communication with the correlator, the analyzer adapted to perform statistical analysis on the input signals from the response input to find selected segments of the stimulus signal.
14. (Original) The apparatus as defined by claim 13 wherein the analyzer determines a point of statistical interest as measured against predetermined criteria.
15. (Original) The apparatus as defined by claim 13 wherein the analyzer interpolates information based upon the input signals from each of the one or more input devices.
16. (Original) The apparatus as defined by claim 13 wherein the analyzer extrapolates information based upon the input signals from the response input.
17. (Original) The apparatus as defined by claim 1 further comprising:  
a computer in electrical communication with the correlator such that the correlator transmits the stimulus signal and the input signals in raw form to the computer.
18. (Currently Amended) The apparatus as defined by claim 17 wherein the correlator performs digital signal processing on the plurality of stimulus signals ~~stimulus signal~~ and the input signals forwarded to the computer.

19. (Original) The apparatus as defined by claim 18 wherein the computer comprises a graphical user interface through which a user selects which statistical analysis is performed.
20. (Original) The apparatus as defined by claim 18 wherein the computer comprises a graphical user interface for displaying the associative mapping in real time.
21. (Original) The apparatus as defined by claim 1 wherein the associative mapping is addressable by content.
22. (Original) The apparatus as defined by claim 1 wherein the response input is coupled to a network.
23. (Original) The apparatus as defined by claim 22 wherein the stimulus input is coupled to the network.
24. (Canceled)
25. (Currently Amended) A method of determining an audience's response to a stimulus, the method comprising:  
receiving, in real time, at least one response to the stimulus;  
correlating, by time, the at least one response and the stimulus to generate an associative mapping of the at least one response, the associative mapping correlating the stimulus, at least one response to the stimulus, and time in a database; and  
storing the associative mapping such that the associative mapping is accessible by content of the at least one response.
26. (Original) The method as defined by claim 25 further comprising:

receiving search criteria representative of content of the at least one response; and

generating a response signal having data identifying the at least one response that meet the search criteria.

27. (Original) The method as defined by claim 26 further comprising:  
forwarding the response signal to a display device to display the at least one response that meet the search criteria.

28. (Original) The method as defined by claim 25 wherein the act of correlating comprises:  
generating an analyzed variable having the at least one response and the stimulus at a given time.

29. (Original) The method as defined by claim 25 wherein the associative mapping correlates the stimulus over time with the at least one response.

30. (Currently Amended) A computer program product for use on a computer system for determining an audience's response to a stimulus, the computer program product comprising a computer usable medium having computer readable program code thereon, the computer readable program code including:

program code for receiving, in real time, at least one response to the stimulus;

program code for correlating, by time, the at least one response, ~~and the stimulus, and time to generate an associative mapping, the associative mapping being capable of correlating multiple stimuli with responses of the at least one response;~~ and

program code for storing the associative mapping such that the associative mapping is accessible by content of the at least one response.

31. (Original) The computer program product as defined by claim 30 further comprising:

receiving search criteria representative of content of the at least one response; and

generating a response signal having data identifying the at least one response that meet the search criteria.

32. (Original) The computer program product as defined by claim 31 further comprising:

forwarding the response signal to a display device to display the at least one response that meet the search criteria.

33. (Original) The computer program product as defined by claim 30 wherein the program code for correlating comprises:

program code for generating an analyzed variable having the at least one response and the stimulus at a given time.

34. (Original) The computer program product as defined by claim 30 wherein the associative mapping correlates the stimulus over time with the at least one response.

35. (Currently Amended) An apparatus for determining an audience's response to a plurality of stimuli ~~a stimulus~~, the apparatus comprising:

an input for receiving, in real time, a plurality of responses to the plurality of stimuli ~~at least one response to the stimulus~~;

a correlator for correlating, by time, the plurality of responses ~~at least one response~~ and the plurality of stimuli ~~stimulus~~ to generate ~~an~~ a multi-channel associative mapping of the plurality of responses and plurality of stimuli with time ~~at least one response~~; and

a storage module operatively coupled with the correlator, the storage module storing the associative mapping such that the associative mapping is accessible by content of the at least one response.

36. (Currently Amended) The apparatus as defined by claim 35 further comprising:

a search input that receives search criteria representative of content of the plurality of responses ~~at least one response~~; and

means for generating a response signal having data identifying the at least one of the plurality of responses ~~response~~ that meet the search criteria.

37. (Currently Amended) An apparatus for processing a response to a stimulus for display in real time, the apparatus comprising:

a response input that receives at least one response signal, each response signal corresponding in time to the stimulus;

a processor operatively coupled with the response input, the processor associating the at least one response signal with at least one portion of the stimulus and ~~over~~ time to produce an associative mapping representative of the at least one response to the at least one portion of the stimulus; and

an output operatively coupled with the processor, the output forwarding a display signal having data representing the associative mapping.

38. (Original) The apparatus as defined by claim 37 further comprising:

a display device for receiving the display signal and displaying the at least one response and the portion of the stimulus as represented in the associative mapping.

39. (Original) The apparatus as defined by claim 37 further comprising a comparator for comparing the stimulus to an archive of a prior response to a prior stimulus stored on a storage device.

40. (Currently Amended) A method for processing a response to a stimulus for display in real time, the method comprising:

receiving at least one response signal, each response signal corresponding in time to the stimulus;

associating the at least one response signal with at least one portion of the stimulus and ~~over~~ time to produce an associative mapping representative of the at least one response to the at least one portion of the stimulus; and

generating a display signal having data representing the associative mapping.

41. (Original) The method as defined by claim 40 further comprising:

displaying the at least one response and the portion of the stimulus as represented in the associative mapping.

42. (Original) The method as defined by claim 40 further comprising comparing the stimulus to an archive of a prior response to a prior stimulus stored on a storage device.

43. (Currently Amended) A computer program product for use on a computer system for processing a response to a stimulus for display in real time, the computer program product comprising a computer usable medium having computer readable program code thereon, the computer readable program code including:

program code for receiving at least one response signal, each response signal corresponding in time to the stimulus;

program code for associating the at least one response signal with at least one portion of the stimulus ~~over~~ and time to produce an associative mapping representative of the at least one response to the at least one portion of the stimulus; and



program code for generating a display signal having data representing the associative mapping.

44. (Original) The computer program product as defined by claim 43 further comprising:

program code for displaying the at least one response and the portion of the stimulus as represented in the associative mapping.

45. (Original) The computer program product as defined by claim 43 further comprising program code for comparing the stimulus to an archive of a prior response to a prior stimulus stored on a storage device.

Claims 46-48 (Canceled)